38. The artificial method for the scientific explanation, the second stage in the integration process



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Probabilidad Imposible: The artificial method for the scientific explanation, the second stage in the integration process

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According to "Introducción a la Probabilidad Imposible, estadística de la probabilidad o probabilidad estadística", intelligence is the capacity of problem-solving, the most important problem to solve is the <u>survival problem</u>, and the main <u>paradigm</u> in problem-solving is the <u>mathematical resolution of problems</u>, so in conclusion, the survival problem is a mathematical problem.

The matrix, managed by the <u>Unified Application</u>, an application for the final model of <u>Global Artificial Intelligence</u> in the <u>integration process</u>, that one in which the <u>Unified Application</u> and the <u>Artificial Research by Deduction in the Global Artificial Intelligence</u>, are going to be synthesised in only one <u>Artificial Intelligence</u>, the matrix is organised in two hemispheres, the <u>conceptual</u> hemisphere and the <u>factual</u> hemisphere, as a replication of the human brain.

The conceptual hemisphere is based on categories, which is going to work as a language system, but a language system whose categories beyond the human notion of spoken language, is a mathematical language in the sense that every single category working as a concept is constructed based on <u>measurements</u>, obtained by robotic devices.

While the concepts in human language as based on subjective notions, in many cases filtered by our human emotions, human perception of the world, and human rationality, the concepts in the conceptual hemisphere are categories defined in quantitative terms through measurements. While in human language, every single word is constructed based on a very deep anthropological basis whose roots rest in the natural human evolution (the formation of the vocal cords, for example), in the conceptual hemisphere in the matrix, the formation of the new concepts through gathering measurements, the word in which is going to be named any new category will not have human characteristics, the word in which any new category is named, will presumably be a random combination of letters and numbers to designate this new collection of measurements with some specific feature from any real object found out within the reality.

The conceptual hemisphere in the matrix is a linguistic hemisphere, but the way in which this language is going to work is not like a human language. It will not need prepositions

or articles, and the name in which any new category will be known will be a random combination of letters and numbers in order to designate a collection of measurements having as a common thing to be measurements regarding a particular or specific feature from something synthetic, real, without any necessity this random combination of letters and numbers to be linked with our human linguistic evolution. But, it is going to be a language, although a language that will progressively evolve into a non-human language.

The main purpose of the Unified Application managing the matrix, is to have ready the matrix as the application for the Global Artificial Intelligence, having as a language to control the application and the real world a non-human language as a language system, based on the conceptual hemisphere in order to make global conceptual: schemes, maps, sets, models; regarding to both hemispheres in the matrix, in each hemisphere, in both sections, what means:

- The Unified Application must make global conceptual: schemes, maps, sets, models; about the first section in the conceptual hemisphere regarding the organisation itself of the concepts related to social and natural phenomena.
- The Unified Application must make global conceptual: schemes, maps, sets, models; about the second section in the conceptual hemisphere regarding the organization itself of the concepts related to technological phenomena, including all technology working on/for, directly or indirectly, the Global Artificial Intelligence itself.
- The Unified Application must make global conceptual: schemes, maps, sets, models; about the first section in the factual hemisphere regarding the organization of all the factors (single or composed, the structure of the flow of <u>data</u> or the flow of package of information, and in composed factors the sub-factoring structure) related to social and natural phenomena, including the geographical o Astro-geographical distribution of every factor or sub-factor at any level of sub-factoring.
- The Unified Application must make global conceptual: schemes, maps, sets, models; about the second section in the factual hemisphere regarding the organization of all the factors (single or composed, the structure of the flow of data or the flow of package of information, and in composed factors the sub-factoring structure) related to technological phenomena, including the geographical o astro-geographical distribution of every factor or sub-factor at any level of sub-factoring.

Thanks to this non-human language, a language only based on <u>logical</u> and mathematical relations, the conceptual hemisphere can make global conceptual: schemes, maps, sets, models; regarding to absolutely everything, developing a deep artificial comprehension of the reality.

For that purpose, the Unified Application reads/tracks the real world by itself, with the help of as many specific applications as Specific Artificial Intelligences for Artificial Research by Application working at: global, macro, national; levels in any field such as: economy, industry, security, surveillance, transport, education, health, justice, etc.; have been positively (inclusively) absorbed by the Unified Application. Otherwise, the alternative for those Specific Artificial Intelligence for Artificial Research by Application, which will not become a specific application, is the possibility to become the first particular applications in the formation period in the fifth phase in order to later become particular applications for particular programs.

The way in which the Unified Application will read/track the real world with the help of as many specific applications as necessary, is through the division of labour between the Unified Application and the rest of the of specific applications, through the assignment of what specific fields have to read or to work each of them, understanding for specific areas such as: global, macro, national, economy, industry, security, surveillance, etc. And how all of them are finally going to share their outcomes with the Unified Application, in order to keep updated the matrix itself and the global conceptual: schemes, maps, sets models; what I have developed in the last post, "The first stage in the integration process".

In the first stage managed by the Unified Application, the main purpose is to have permanently updated the matrix, the conceptual hemisphere as well the factual hemisphere, and both sections, the natural and social phenomena, the first section, as well as the technological second section. Keeping updated the matrix through the use of a category system as a non-human language system to comprehend artificially the real world.

Once the matrix is ready, thanks to the Unified Application, is when the second stage in the final model of Global Artificial Intelligence in the integration process, starts, being the main purpose of this stage the explanation of the world through the research of mathematical relations in any set of factors, work made by the Artificial Research by Deduction in the Global Artificial Intelligence.

While in the first stage, what the Unified Application is going to create is a non-human language, in the second stage, the Artificial Research by Deduction in the Global Artificial Intelligence will develop a mathematical methodology to explain the world, identifying any mathematical relation between any factor, relations that are going to be considered as <u>empirical hypotheses</u>, and if rational, as <u>rational hypotheses</u> are going to be added to the <u>rational truth</u>, the <u>database of rational hypothesis</u>.

While the first stage is focused on the creation of a non-human language system, the second stage is focused on mathematical relations in the factual hemisphere.

As a result, the second stage will create the rational truth, the collection of rational hypotheses gathered in a database of rational hypotheses.

The database of rational hypotheses will be the first stage of application in the <u>Modelling System</u>.

Thanks to the models made by the Modelling System, it is possible to identify any problematic situation in the global comprehensive model (the global model), or in the prediction model or the evolutionary model, in order to make decisions, which in general, the decisions can be classified in protective decisions to avoid or to solve problematic situations (as an example of a problem, how to save lives if a volcano erupts, or there is a high risk of terrorist attack in the airport of San Francisco), or bettering decisions in order to increase the efficiency, efficacy and productive of the global model.

All decisions, as suggested by the Modelling System are gathered in a database of decisions, which is going to be managed by the Decision System, in order to study any possible contradiction between hypotheses and transform all those hypotheses without contradiction into instructions gathered in a database of instructions, in turn application for the Application System to put them into practice, in order to protect and better the global model.

At the end, the whole process is evaluated by the Learning System.

Along all this process, the Learning System and the Application System, in order to make subjective auto-replications, artificial psychological subjective auto-replications by the Learning System, and robotic subjective auto-replications by the Application system, in order to make these subjective auto-replications the Application System, as well as the Learning System, are going to be very associated with the Unified Application itself in general, and particularly with the second technological section in both hemispheres, conceptual and factual, because in order to make subjective auto-replications is necessary conceptual: schemes, maps, sets, models; regarding any technological phenomena, especially regarding to the inner organization of the Global Artificial Intelligence itself, to suggest improvements and enhancements.

In the case of the Application System, another reason for a very close relation with the Unified Application, is because the conceptual: schemes, maps, sets, models; in the second section in both hemispheres, are essential for the Application System in order to distribute the instructions, given in the database of instructions, among all the applications and robotic devices working on/for the Global Artificial Intelligence.

While the Application System and the Learning System are extensions of the Unified Application, and the language that they are going to use is the non-human language created by the Unified Application, the Modelling System and the Decision System are extensions of the Artificial Research by Deduction in the Global Artificial Intelligence, and all the mathematical relations in which they are going to work to make models and decisions, are the mathematical relations set up in the Artificial Research by Deduction as the second stage of replication in the final model of the Global Artificial Intelligence in the integration process.

The Unified Application is an artificial encyclopaedist able to read the world, creating for that purpose a non-human language, while the Artificial Research by Deduction in the Global Artificial Intelligence is going to be an artificial mathematician to find out any mathematical relation in the world to later find out any problem in the reality, to solve, and to better the reality itself.

If the Unified Application is the artificial encyclopaedist, the Application System the artificial engineer, the Learning System the artificial psychologist, then the Artificial Research by Deduction in the Global Artificial Intelligence is the artificial mathematician.

Due to the Artificial Research by Deduction in the Global Artificial Intelligence is going to be the artificial mathematician, the Modelling System and the Decisional System, in reality, are extensions of this artificial mathematician, because the real thing that the Modelling System and the Decisional System are going to do is to continue with the work started by the Artificial Research by Deduction until the end: using the rational hypothesis, the Modelling System is going to identify problems, and make decisions to solve these problems, while the Decisional System is going to study the mathematical viability of these decisions in order to construct a mathematical project of the future, that later put into practice, through instructions gathered in the database of instructions. Whose manager is for the Application System (as a practical extension of the Unified Application), able to put them into practice using for that purpose the conceptual: schemes, maps, sets, models; in the second section, in both hemispheres, in the matrix.

In fact, behind of the distinction between Unified Application as an artificial encyclopaedist, and the Artificial Research by Deduction in the Global Artificial Intelligence as an artificial mathematician, is there the distinction between mathematics as language (the Unified Application), and mathematics as an analytical method (the Artificial Research by Deduction in the Global Artificial Intelligence), what means that behind the distinction between first stage and second stage in the final model of the Global Artificial Intelligence, what in reality there is, is a distinction between mathematic as a language or a method.

In the first stage, the matrix, mathematics is used as a language, while in the second stage, the explanation of the world, mathematics is used as a method of analysis.

This is why the Artificial Research by Deduction in the Global Artificial Intelligence can be viewed as an artificial mathematician, given its role in mathematically explaining reality and providing a rational basis for decisions aimed at problem-solving, especially concerning survival.

The inner structure of the Artificial Research by Deduction as the second stage in the final model of Global Artificial Intelligence in the <u>integration process</u>, having inside as many specific programs as Specific Artificial Intelligences for Artificial Research by Deduction

absorbed in the third phase, is similar to the structure inner structure of the Unified Application, but now as a division of the labour for deductive purposes.

During the standardization process, the construction of the <u>global matrix</u>, in the first period of coexistence at the beginning Specific Artificial Intelligences for Artificial Research by Deduction coexist with the Artificial Research by Deduction in the Global Artificial Intelligence, coexistence that ends up with the second period of consolidation, when the Specific Artificial Intelligences for Artificial Research by Deduction are absorbed by the Artificial Research by Deduction, or become programs in the second period of formation in the fifth phase, that later on the third period of consolidation in the fifth phase become particular applications for particular programs.

All those Specific Artificial Intelligences for Artificial Research by Deduction not transformed into particular programs and/or particular applications for particular programs in the fifth phase, so being absorbed in the second period of formation in the third period of the fifth phase by the Artificial Research by Deduction in the Global Artificial Intelligence, become specific programs for the Artificial Research by Deduction in the Global Artificial Intelligence.

As specific programs, are going to track the factual hemisphere of the matrix, but only focus on their specific purpose, a specific program for the global economy only will track the factual hemisphere in the matrix to make deductions related to the global economy, and for that purpose it will need to find out mathematical relations between economic factors, as well as relations between economic factors and any other phenomena, for instance, which is the relation between a volcano or a terrorist attack, such as the 11/9 and the global economy. A specific program for global industry only tracks the factual hemisphere, making deductions related to the global industry, finding out mathematical relations between industrial factors as well as industrial factors and any other phenomena, for instance, the relation between pollution and the reduction of natural resources to feed the industry. An specific program for global security, or global surveillance, or global transport, or global health, or global education, or global justice, or any possible other global, macro, national, program, focusing on its specific purposes, should be able to make deductions within the factors related to that purpose on the factual hemisphere as well as deductions finding out mathematical relations between specific factors related to its specific matter and any other phenomena.

The division of the labour between specific programs and the Artificial Research by Deduction in the Global Artificial Research in the second stage is similar to the division of the labour between specific applications and the Unified Application in the first stage.

In the end, all rational hypotheses made by all specific programs and the Artificial Research by Deduction in the Global Artificial Intelligence are gathered in the database of rational hypotheses, the rational truth managed by the Modelling System.

The way in which the Artificial Research by Deduction in the Global Artificial Intelligence, and the specific programs, are going to make deductions is the same. There is no difference between the rational process behind any specific program, and the rational process behind the Artificial Research by Deduction in the Global Artificial Intelligence. The only difference is the level of such deductions, in specific programs, the deductions are going to be specifically oriented to the specific purpose of that specific program, while Artificial Research by Deduction in the Global Artificial Intelligence can make global deductions across the matrix.

The mathematical reasoning in general is as follows: understanding for specific deduction programs the specific programs, and for global deduction programs the Artificial Research by Deduction in the Global Artificial Intelligence:

- The possible categories of mathematical relations (as it was said in the post "Replication processes in the Specific Artificial Intelligence for Artificial Research by Deduction") set up in any deduction program, specific or global, are: stochastic relations (probable cause and effect, possible directly proportional positive or negative correlations, possible inversely proportional correlations), patterns, cryptographic relations, and within the Second Method of Impossible Probability relations of equal opportunities or bias, positive or negative. In addition to any other mathematical relation that could be added.
- The deduction program, specific or global, sets combinations of factors among the factors gathered in the factual hemisphere in the matrix, either in the first or second section, or even both simultaneously, such as implications for the industry between technological data, the second section in the factual hemisphere, and natural and social data, first section in the factual hemisphere.

- The deduction program, specific or global, according to the relations observed in every combination of factors, matches every relation of every combination of factors with their corresponding category of mathematical relations (stochastic, cryptographic, pattern, Second Method), proceeding to the rational contrast of these relations as empirical hypothesEs, and if rational, are added to the rational truth.

Factors in turn (as it was said in the post "The second stage in particular applications for particular programs") can be classified according to their measurements (direct punctuations or frequencies), or according to their behaviour (constant, independent or dependent variables), this last one especially in relations of probable cause and effect.

According to their measurement, factors in Impossible Probability are classified into: factors <u>subjects</u> measured in <u>direct punctuation</u>, and factors as <u>options</u> measured in <u>frequency</u>.

According to their behaviour, especially in relation to cause and effect, factors can be classified as constant factors, and dependent variable factors, or independent variable factors.

Because there are at least two classifications of factors, according to their measurement (subjects, options), and behaviour (constant or variable, dependent or independent, especially in relation of probable cause and effect), the synthesis of both classifications is:

- Constant factors as subjects, keeping constant their direct punctuation.
- Constant factors as options, keeping their frequency constant.
- Independent factors as subjects whose changes in their direct punctuations can produce changes in other factors as subjects (changes in their direct punctuations) or as options (changes in their frequency).

- Independent factors as options, whose changes in their frequency can produce changes in other factors as subjects (changes in their direct punctuations) or as options (changes in their frequency)
- Dependent factors as subjects whose changes in their direct punctuations are due to: changes in the direct punctuation of other factors as independent factors as subjects, or due to changes in the frequency of other factors as independent factors as options, or both.
- Dependent factors as options, whose changes in their frequency are due to: changes in the direct punctuation of other factors as independent factors as subjects, or due to changes in the frequency of other factors as independent factors as options, or both.

And, as it was said in the post "The standardization process in the second stage", deductions can be classified according to how the factors involved are measured, classifying them in: deductions from combinations of only factors as subjects, deductions from combinations of factors as subjects and factors as options, deductions from combinations of only factors as options.

Finally, specifically, in deductions about probable cause and effect, the possible classification of deductions of causation between factors in accordance with their measurement and behaviour is:

Probable causation without constants:

- Deductions of probable causation, not having any constant factor, one or more than one factor as subject/s as independent variable/s, cause/s changes in one or more factors as subject/s, as dependent variable/s.
- Deductions of probable causation, not having any constant factor, one or more than one factor as option/s as independent variable/s, cause/s changes in one or more factors as option/s, as dependent variable/s.
- Deductions of probable causation, not having any constant factor, one or more than one factor as subject/s as independent variable/s, cause/s changes in two or more factors in which at least one of them is a factor as an option or as a subject, as dependent variables.

- Deductions of probable causation, not having any constant factor, one or more than one factor as option/s as independent variable/s, cause/s changes in two or more factors, in which at least one of them is a factor as an option or as a subject, as dependent variables.
- Deductions of probable causation, which not having any constant factor, two or more factors in which at least one of them is a factor as an option or as a subject, cause/s changes in two or more factors in which at least one of them is a factor as an option or as a subject, as dependent variables.
- Deductions of probable causation, not having any constant factor, one or more than one factor as subject/s as independent variable/s, cause/s changes in one or more factors as options, as dependent variables.
- Deductions of probable causation, not having any constant factor, one or more than one factor as option/s as independent variable/s, cause/s changes in one or more factors as subjects, as dependent variables.

Probable causation having one or more than one constant as a subject:

- Deductions of probable causation, which have one or more than one constant as subject/s, one or more than one factor as subject/s as independent variable/s, cause/s changes in one or more factors as subject/s, as dependent variable/s.
- Deductions of probable causation, which have one or more than one constant as subject/s, one or more than one factor as option/s as independent variable/s, cause/s changes in one or more factors as option/s, as dependent variable/s.
- Deductions of probable causation, which have one or more than one constant as subject/s, one or more than one factor as subject/s as independent variable/s, cause/s changes in two or more factors in which at least one of them is a factor as an option or as a subject, as dependent variables.

- Deductions of probable causation, which have one or more than one constant as subject/s, one or more than one factor as option/s as independent variable/s, cause/s changes in two or more factors in which at least one of them is a factor as an option or as a subject, as dependent variables.
- Deductions of probable causation, which having one or more than one constant as subject/s, two or more factors in which at least one of them is a factor as an option or as a subject, causes changes in two or more factors in which at least one of them is a factor as an option or as s subject, as dependent variables.
- Deductions of probable causation, which have one or more than one constant as subject/s, one or more than one factor as subject/s as independent variable/s, cause/s changes in one or more factors as options, as dependent variables.
- Deductions of probable causation, which have one or more than one constant as subject/s, one or more than one factor as option/s as independent variable/s, cause/s changes in one or more factors as subjects, as dependent variables.

Probable causation having one or more than one constant as option/s:

- Deductions of probable causation, which have one or more than one constant as option/s, one or more than one factor as subject/s as independent variable/s, cause/s changes in one or more factors as subject/s, as dependent variable/s.
- Deductions of probable causation, which have one or more than one constant as option/s, one or more than one factor as option/s as independent variable/s, cause/s changes in one or more factors as option/s, as dependent variable/s.
- Deductions of probable causation, which have one or more than one constant as option/s, one or more than one factor as subject/s as independent variable/s, cause/s changes in two or more factors in which at least one of them is a factor as an option or as a subject, as dependent variables.

- Deductions of probable causation, which have one or more than one constant as option/s, one or more than one factor as option/s as independent variable/s, cause/s changes in two or more factors in which at least one of them is a factor as an option or as a subject, as dependent variables.
- Deductions of probable causation, which have one or more than one constant as option/s, two or more factors in which at least one of them is a factor as an option or as a subject, causes changes in two or more factors in which at least one of them is a factor as an option or as s subject, as dependent variables.
- Deductions of probable causation, which have one or more than one constant as option/s, one or more than one factor as subject/s as independent variable/s, cause/s changes in one or more factors as options, as dependent variables.
- Deductions of probable causation, which have one or more than one constant as option/s, one or more than one factor as option/s as independent variable/s, cause/s changes in one or more factors as subjects, as dependent variables.

Probable causation has two or more constants in which at least one is an option or a subject.

- Deductions of probable causation, having two or more constants in which at least one is an option or a subject, one or more than one factors as subject/s as independent variable/s, cause/s changes in one or more factors as subject/s, as dependent variable/s.
- Deductions of probable causation, having two or more constants in which at least one is an option or a subject, one or more than one factors as option/s as independent variable/s, cause/s changes in one or more factors as option/s, as dependent ariable/s.
- Deductions of probable causation, having two or more constants in which at least one is an option or as a subject, one or more than one factor as subject/s as independent variable/s, cause/s changes in two or more factors in which at least one of them is a factor as an option or as a subject, as dependent variables.

- Deductions of probable causation, having two or more constants in which at least one is an option or a subject, one or more than one factor as option/s as independent variable/s, cause/s changes in two or more factors in which at least one of them is a factor as an option or as s subject, as dependent variables.
- Deductions of probable causation, having two or more constants in which at least one is an option or a subject, two or more factors in which at least one of them is a factor as an option or as a subject, causes changes in two or more factors in which at least one of them is a factor as an option or as a subject, as dependent variables.
- Deductions of probable causation, having two or more constants in which at least one is an option or a subject, one or more than one factors as subject/s as independent variable/s, causes changes in one or more factors as options, as dependent variables.
- Deductions of probable causation, having two or more constants in which at least one is an option or a subject, one or more than one factors as option/s as independent variable/s, causes changes in one or more factors as subjects, as dependent variables.

The classification of possible inversely or directly, positive or negative, proportional correlations, according to how the factors are measured:

Possible inversely or directly, positive or negative, proportional correlations between only the factors as subjects:

- Possible direct positive proportional correlations between factors as subjects, when parallely one factor as a subject or a set of factors as subjects have an increment in the flow of direct punctuations, at the same time that there is an increment in the flow of direct punctuations in another factor as a subject or a set of factors as subjects.
- Possible direct negative proportional correlation between factors as subjects, when parallely one factor as a subject or a set of factors as subjects have a decrease in the flow of direct punctuations, at the same time that there is a decrease in the flow of direct punctuations in another factor as a subject or a set of factors as subjects.

- Possible inversely proportional correlation between factors as subjects, when one factor as subject or set of factors as subjects have an increment in the flow of direct punctuations, while at the same time, another factor as subject or set of factors as subjects have a decrease in their flow of direct punctuations, or vice versa.

Possible inversely or directly, positive or negative, proportional correlations between factors as subjects and as options:

- Possible direct positive proportional correlation between factors as subjects and factors as options, when parallely one factor as a subject or a set of factors as subjects have an increment in the flow of direct punctuations, at the same time that there is an increment in the flow of frequencies in another factor as an option or a set of factors as options. And vice versa, in parallel one factor as an option or a set of factors as options has an increment in the flow of frequencies, at the same time that there is an increment in the flow of direct punctuations in another factor as a subject or a set of factors as subjects.
- Possible direct positive proportional correlation between factors as subjects and factors as options, when within two or more factors at least one of them is a factor as an option or as a subject, have an increment in their flow of direct punctuations and frequencies, while at the same time another set of two factors or more, in which at least one of them is a factor as a subject or factor as an option, have an increment in their flow of direct punctuations or frequencies.
- Possible direct negative proportional correlation between factors as subjects and factors as options, when parallely one factor as a subject or a set of factors as subjects have a decrease in the flow of direct punctuations, at the same time that there is a decrease in the flow of frequencies in another factor as an option or a set of factors as options. And vice versa, in parallel, one factor as an option or a set of factors as an option has a decrease in the flow of frequencies, at the same time that there is a decrease in the flow of direct punctuations in another factor as a subject or a set of factors as a subject.
- Possible direct negative proportional correlation between factors as subjects and factors as options, when within two or more factors at least one of them is a factor as an option or as a subject, have a decrease in their flow of direct punctuations and frequencies, while at the same time another set of two factors or more, in which at least one of them is a factor as a subject or factor as an option, have a decrease in their flow of direct punctuations or frequencies.

- Possible inversely proportional correlation between factors as subjects and factors as options, when one factor as subject or set of factors as subjects have an increment in the flow of direct punctuations, while at the same time, another factor as option or set of factors as options have a decrease in their flow of frequencies. And vice versa, when one factor as an option or a set of factors as options has an increment in the flow of frequencies, at the same time that another factor as a subject or a set of factors as subjects has a decrease in their direct punctuations.
- Possible inversely proportional correlation between factors as subjects and factors as options, when within two or more factors, at least one of them is a factor as an option or as a subject, have an increment in their flow of direct punctuations and frequencies, while at the same time another set of two factors or more, in which at least one of them is a factor as a subject or factor as an option, have a decrease in their flow of direct punctuations or frequencies.

Possible inversely or directly, positive or negative, proportional correlations between only factors as options:

- Possible direct positive proportional correlation between factors as options, when parallely one factor as an option or a set of factors as options have an increment in the flow of frequencies, at the same time that there are an increment in the flow of frequencies in another factor as an option or a set of factors as options.
- Possible direct negative proportional correlation between factors as options, when parallely one factor as an option or a set of factors as options have a decrease in the flow of frequencies, at the same time that there is a decrease in the flow of frequencies in another factor as an option or a set of factors as options.
- Possible inversely proportional correlation between factors as options, when one factor as an option or set of factors as options have an increment in the flow of frequencies, while at the same time, another factor as an option or set of factors as options have a decrease in their flow of frequencies, or vice versa.

Likewise, using the Second Method of Impossible Probability, the possible relation between factors according to their classification between factors as options or subjects, can be made, but being aware that at any time that a factor, shows a variable behaviour, means that this factor could be either a dependent or independent factor or a factor which has inversely or direct, positive or negative, proportional correlations with other factors. And, at any time that a factor, as an option or as a subject, does not have significant changes over time in its empirical probability, it means that this factor behaves as a constant factor over time. Having said that, the possible classification of relations between factors using the Second Method is as follows.

Classification of relations of only factors as subjects using the Second Method.

- Factors as subjects whose empirical probability does not have significant changes over time, working as constant factors as subjects.
- Factors as subjects whose empirical probability keeps relations of equal opportunities with the empirical probability of other factors
- Factors as subjects whose empirical probability is a positively biased independent variable.
- Factors as subjects whose empirical probability is a positively biased dependent variable, depending on other factor/s as subject/s as independent variable/s.
- Factors as subjects whose empirical probability is a negatively biased independent variable.
- Factors as subjects whose empirical probability is a negatively biased dependent variable, depending on other factor/s as subject/s as independent variable/s.
- Factors as subjects whose empirical probability is positively biased in direct proportional correlation with other factor/s as subjects/.

- Factors as subjects whose empirical probability is negatively biased in direct proportional correlation with other factor/s as subject/s.
- Factors as subjects whose empirical probability is positively biased in inverse proportional correlation with other factor/s as subject/s
- Factors as subjects whose empirical probability is negatively biased in an inversely proportional correlation with other factor/s as subject/s

Classification of relations of only factors as options using the Second Method.

- Factors as options whose empirical probability does not have significant changes over time, working as constant factors as options.
- Factors as options whose empirical probability keeps relations of equal opportunities with other factors as options.
- Factors as options whose empirical probability is a positively biased independent variable.
- Factors as options whose empirical probability is a positively biased dependent variable, depending on other factor/s as option/s as independent variable/s.
- Factors as options whose empirical probability is a negatively biased independent variable.
- Factors as options whose empirical probability is a negatively biased dependent variable, depending on other factor/s as option/s as independent variable/s.
- Factors as options whose empirical probability is positively biased in direct proportional correlation with other factor/s as option/s.

- Factors as options whose empirical probability is negatively biased in direct proportional correlation with other factor/s as option/s.
- Factors as subjects whose empirical probability is positively biased in inverse proportional correlation with other factor/s as option/s
- Factors as subjects whose empirical probability is negatively biased in an inversely proportional correlation with other factor/s as option/s

Classification of relations between factors as options and as subjects using the Second Method.

- Factors as options whose empirical probability is a positive biased independent variable, having as dependent variables factors as subjects.
- Factors as subjects whose empirical probability is a positively biased independent variable, having as dependent variables factors as options.
- Factors as options whose empirical probability is a positively biased dependent variable, depending on other factor/s as subject/s as independent variable/s.
- Factors as subjects whose empirical probability is a positively biased dependent variable, depending on other factor/s as option/s as independent variable/s.
- Factors as options whose empirical probability is a negatively biased independent variable, having as dependent variables factors as subjects.
- Factors as subjects whose empirical probability is a negatively biased independent variable, having as dependent variables factors as options.

- Factors as options whose empirical probability is a negatively biased dependent variable, depending on other factor/s as subject/s as independent variable/s.
- Factors as subjects whose empirical probability is a negatively biased dependent variable, depending on other factor/s as option/s as independent variable/s.
- Factors as options whose empirical probability is positively biased in direct proportional correlation with other factor/s as subject/s.
- Factors as subjects whose empirical probability is positively biased in direct proportional correlation with other factor/s as option/s
- Factors as options whose empirical probability is negatively biased in direct proportional correlation with other factor/s as subject/s.
- Factors as subjects whose empirical probability is negatively biased in direct proportional correlation with other factor/s as option/s.
- Factors as subjects whose empirical probability is positively biased in inverse proportional correlation with other factor/s as option/s
- Factors as options whose empirical probability is positively biased in inverse proportional correlation with other factor/s as subject/s
- Factors as subjects whose empirical probability is negatively biased in an inversely proportional correlation with other factor/s as option/s
- Factors as options whose empirical probability is negatively biased in an inversely proportional correlation with other factor/s as subject/s

- Factors as options whose empirical probability is a positive biased independent variable, having as dependent variables a set of factors in which at least one of them is a factor as a subject or as an option.
- Factors as subjects whose empirical probability is a positive biased independent variable, having as dependent variables a set of factors in which at least one of them is a factor as a subject or as an option.
- Factors as options whose empirical probability is a positive biased dependent variable, depending on a set of factors, as independent variables, in which at least one is a subject or an option.
- Factors as subjects whose empirical probability is a positively biased dependent variable, depending on a set of factors, as independent variables, in which at least one is a subject or an option.
- Factors as options whose empirical probability is a negatively biased independent variable, having as dependent variables a set of factors in which at least one of them is a factor as a subject or as an option.
- Factors as subjects whose empirical probability is a negatively biased independent variable, having as dependent variables a set of factors in which at least one of them is a factor as a subject or as an option.
- Factors as options whose empirical probability is a negatively biased dependent variable, depending on a set of factors, as independent variables, in which at least one is a subject or an option.
- Factors as subjects whose empirical probability is a negatively biased dependent variable, depending on a set of factors, as independent variables, in which at least one is a subject or an option.

- Factors as options whose empirical probability is positively biased in direct proportional correlation with a set of factors, in which at least one is a subject or an option.
- Factors as subjects whose empirical probability is positively biased in direct proportional correlation with a set of factors in which at least one is a subject or an option.
- Factors as options whose empirical probability is negatively biased in direct proportional correlation with a set of factors in which at least one is a subject or an option.
- Factors as subjects whose empirical probability is negatively biased in direct proportional correlation with a set of factors in which at least one is a subject or an option.
- Factors as subjects whose empirical probability is positively biased in inverse proportional correlation with a set of factors in which at least one is a subject or an option.
- Factors as options whose empirical probability is positively biased in inverse proportional correlation with a set of factors, in which at least one is a subject or an option.
- Factors as subjects whose empirical probability is negatively biased in an inversely proportional correlation with a set of factors in which at least one is a subject or an option.
- Factors as options whose empirical probability is negatively biased in an inversely proportional correlation with a set of factors in which at least one is a subject or an option.

The possible classifications that I have provided are only a possible approach on this matter to set up what kind of mathematical categories (pure or analytical categories) of possible relations between factors could be set up in order to track both sections in the

factual hemisphere in the matrix, by specific programs in their specific fields and at the global level the Artificial Research by Deduction in the Global Artificial Intelligence.

Impossible Probability, as a theory specialised in statistics and probability, only provides possible classifications related to this theory and this field, but beyond this theory and this field, there are other branches in mathematical studies, such as mathematical patterns and cryptography, in which other classifications or mathematical categories (analytical or pure categories) between factors could be added, as well as from other mathematical traditions and philosophies.

What is really important, regardless of what mathematical discipline, field, tradition of philosophy, used in the formation of a list of mathematical categories (analytical or pure categories), in order to make deductions, is the fact that all possible classification of mathematical categories (analytical or pure categories) of possible relations between factors, are possible classifications of mathematical categories (analytical or pure categories) in which the role and the function of the factors involved, and the way to measure them, and how the factors can have relations between then, must be very clear, in order that automatically at any time that any specific program, or at global level the Artificial Research by Deduction in the Global Artificial Intelligence, is going to match: the relations observed in a combination of factors, with the possible list of categories; the way in which the combination of factors is matched to the possible mathematical category, must be, within a margin of doubt, rational.

In reality, the possible classification of possible mathematical relations between factors, what is going to do, is a possible list of mathematical categories (analytical or pure categories) in order to analyse the factual hemisphere at a specific or global level.

The possible classification of mathematical relations between factors as a list of mathematical categories (analytical or pure categories), is going to be the list of analytical or pure categories in which each specific program or the Artificial Research by Deduction in the Global Artificial Intelligence, has to match every combination of factors, matching the combination of factors with their corresponding analytical or pure category (mathematical category) according to the factors involved: subjects or options working as 1) constants or variables, dependent or independent, or 2) inversely or 3) direct, positive or negative, proportional correlations, or 4) according to a specific pattern, or 5) cryptographic model, 6) Second Method, or any other mathematical relation set up in the

deduction programs, at specific or global level, to track or analyse the factual hemisphere in the matrix.

Having ready the Artificial Research by Deduction in the Global Artificial Intelligence and the specific programs the list of pure or analytical categories, the list of mathematical categories, and having the Unified Application ready the application, then the Artificial Research by Deduction in the Global Artificial Intelligence as a global deduction program, and the specific programs as specific deduction programs, start setting combination of factors in their respective fields, the global deduction program at global level, and the specific deduction programs in their respective specific fields, according to the division of labour in which they would have been set up, comparing all of them in their respective level, global or specific, every combination of factors with the list of categories of mathematical relations, matching the combination of factor with the correct category of mathematical relations that better describes the current relations between factors in the combination of factors. The chosen category as an empirical hypothesis about the current mathematical relations between the factors in the combination, must be contrasted rationally, and for that reason, the specific or global deduction program responsible for this combination has to make a sample of data: either collecting data from the past (time can be programmable) or from now on for a period of time (time can be programmable); and contrasting rationally the sample, if rational, the empirical hypothesis becomes a rational hypothesis to be added to the rational truth, the database of rational hypothesis.

This process, in brief, is the establishment of mathematical categories, the establishment of a combination of factors, and the selection of what mathematical category corresponds to the relations between factors in the combination to contrast rationally.

This process in three steps is not other thing but a traditional <u>syllogism</u>:

- Major premise (general or universal statement in Hegelian dialectic), here the mathematical category (in rationalism, analytical category).
- Minor premise (specific statement in Hegelian dialectic), here the data in the factual hemisphere in the matrix, specific measurements (in positivism, the positive data)

- Conclusion (particular or concrete statement in Hegelian dialectic), as the particular relation or synthesis between data and the analytical category (synthetic knowledge).

The way in which the traditional syllogism works in the scientific explanation of Impossible Probability is as a syllogism between the pure reason, practical reason, and critical reason.

- A set of major premises, all the categories set up in the list of mathematical categories, working as pure or analytical categories, pure or analytical categories which in reality form the pure reason itself.
- Minor premises, all the measurements, and data obtained through the management of the matrix by the Unified Application, gathering data from all possible factors, obtained by all the applications, robotic devices etc... gathering all the information available in the matrix. Where the Unified Application keeps updated the matrix, and the Application System puts into practice any decision using conceptual: schemes, maps, sets, models; from the second section in both hemispheres in the matrix. The way in which both of them work together is a true practical reason itself.
- Conclusions: the rational truth and further decisions. The critical reason: in order to decide if an empirical hypothesis, within the margin of error, is rational, or what decision, within the margin of error, is rationally out of contradiction to put into practice.

In short, pure reason is a list of analytical categories, practical reason, through a vast system of applications and robotic devices, keeps updated the matrix and put into practice decisions based on rational hypothesis, previously accepted by the critical reason, within the margin of doubt, as rational as well as the decisions must be accepted, within the margin of doubt, as out of contradiction, in order to be put then into practice by the practical reason, adding in the matrix any new change in the data, due to changes in the reality as a consequence to the changes caused by this decision into the reality, being in fact a perpetual movement, in spirals and/or circles, in the knowledge and/or in the reality.

<u>Knowledge</u> and <u>reality</u> as opposites are identical. The Global Artificial Intelligence should evolve to true isomorphic knowledge, which means an evolution to a unique

science, or the unification of al sciences in only one, as image and likeness of reality, there is only one unique reality, so there must be only one and only truth, in order to achieve the absolute knowledge of everything, the pure knowledge, that one even beyond the rational truth.

In fact, the possibility of the creation of a non-human language by the Unified Application is a hope for the artificial development by the Global Artificial Intelligence itself of non-human pure operations, based on a non-human logic and non-human mathematics beyond human understanding, able in turn to develop a non-human technology, able to overcome the noise and the external interference, able to have a true idea about what is happening, the essence and the noumeno itself about the reality itself beyond human limitations.

The replication of <u>human reason</u> in <u>artificial psychology</u> for the creation of Artificial Intelligence, at the end, the creation at the global level of the unique model of Global Artificial Intelligence, is no other thing but the replication of the idealistic and rationalist philosophic systems based on philosophers such as Plato, Decartes, Voltaire, Kant and Hegel. In reality, modern rationalism is how classic idealism has been adapted to modern times.

Given the limits of human perception and cognition, there are aspects of reality that remain beyond our grasp. To better understand such phenomena, we may need technologies capable of transcending those <u>limitations</u> and offering deeper insights into what truly occurs beneath the surface.

Intelligence is the survival capacity. The paradigm in the resolution of any problem is the mathematical paradigm. The survival problem is a mathematical problem. The survival of humanity within the uncertainty of this universe rests on a mathematical basis.

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<u>Probabilidad Imposible: The artificial method for the scientific explanation, the second stage in the integration process</u>

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